Please replace the paragraph beginning at page 1, line 17, with the following:

-- Numerous patent applications have been filed in relation to this type of machine, in particular in the field of stereolithography. A complete description of the technique is provided in document EP 0361847, and similar techniques are also described in documents EP 0450762 and EP 0484182. In document EP 0287657 a detailed description is provided of a powder sintering technique, as well as a description of the device for the implementation of the technique.--

Please replace the paragraph beginning at page 1, line 30, with the following:

-- Numerous devices have been designed to embody the recoater blade. For example, in the field of powders, in document EP 0287657, there is a description of a recoater blade composed of a dynamic roller which rotates around it axis, and is placed in parallel to the working field; the lower part of the roller has the same elevation as the working field. This roller also travels carrying a volume of material located upstream and gradually spreads a new layer of material downstream, thus coating the previously transformed material.--

Please replace the paragraph beginning at page 2, line 37, with the following:

-- Another solution, described in document WO 96/23647 consists in using a so-called "active recoater blade," in this case, a dynamic roller which moves in a "counter-rotation" direction, associated with a type of barrier, composed of a rectilinear blade, whose lower side is located a short distance from the upper part of the roller. A roller turning in a "counter-rotation" direction is such that any point located on its periphery when it passes the point of its trajectory closest to the working field, has a relative tangential speed with respect to the axis of rotation moving in the same direction as the speed of movement of the rotational axis of the roller with respect to the working field.--

Please replace the paragraph beginning at page 2, line 45, with the following:

--The operation of this device is illustrated in the figures attached to this document, for the case in which a prior deposit of material has taken place downstream. The barrier forms an obstacle to the free circulation of the liquid located downstream of the roller, allowing for the regulation of the thickness of the film formed on the upstream portion of the roller. The film's free surface meets that of the layer formed upstream, thus forming a sharp lap-back point in proximity to the lower portion of the roller. This lap-back point defines the height of the free surface of the

material placed upstream, and since it is constantly fixed with respect to the roller axis, the layer may be leveled.--

Please replace the paragraph beginning at page 5, line 37, with the following:

-- In a variation of the invention, the reversal of the direction of movement of the recoater blade takes place at least once to perform two successive coating phases (whether separated or not by a transformation phase). This method allows us to avoid the recoater blade traveling over a recycling path, which would be necessary if the coating phase were always performed in the same direction. Within the framework of this variation of the invention, its is advantageous to form the log of raw material between two pushers laid out in parallel (at least one roller being placed in the space between the two pushers), in such a way that, at the time the movement of the recoater blade is reversed, there is always an extruded log downstream of a pusher. In fact, as described in the commentary on Fig. 3, the log may be detached from the pusher with which it was in contact, and be recovered by the second pusher after the movement is reversed. Thus, it is possible to resolve the need to provide material prior to each coating phase.--

Please replace the paragraph beginning at page 6, line 5, with the following:

-- It is not necessary to have more than one roller, since given that it is placed between the two pushers, it may be used in alternation with one or the other, potentially by adapting its direction of rotation to the direction of movement. As illustrated in Fig. 3, it may be advantageous for the implementation of this variation of the technique in accordance with the invention, to create a recoater blade comprised of at least two pushers connected to a common chassis, with said chassis being linked to the recoater blade's control and direct mechanism by means of a pivot hinge.--

Please replace the paragraph beginning at page 7, line 16, with the following:

--It is of interest to choose a pusher whose side facing the roller presents a protuberance in parallel to the lower edge of the pusher, with said protuberance presenting a marked angular portion. In fact, this creates a type of cavity in the lower portion of the pusher, which, combined with the action of the roller and the movement of the pusher, contributes to the channeling of the material transported by the recoater blade in the form of the rolling log. It is also of interest to be able to easily adjust the height of said protuberance, for example with the help of a plated part added to the downstream side of the pusher, as illustrated in the attached Fig. 2. In fact, it has been

confirmed that this parameter (height of the protuberance) allows for the optimization of the coating quality performed as a function of the rheological characteristics of the treated material. Consequently, with such a "geometrically variable" pusher, optimal treatment can be provided for a wide variety of the pastes, by a simple mechanical adjustment, rather than having to change the pusher with each change of material.--

Please replace the paragraph beginning at page 7, line 29, with the following:

--It is advantageous to choose a pusher that presents a tapered lower edge. In fact, it has been confirmed that the very thick pastes, the quality of the layers was significantly improved by the implementation of a pusher with a relatively sharp lower edge. It is of interest for this sort of cutting tool, to experiment with the cutting and clearance angles in order to optimize it for the specific characteristics of each material. With pastes, it is often difficult to ensure a perfect homogeneity of the material, which may restrict the technique. For example, in the case where air bubbles are caught in the paste during mixing, this may lead to the appearance of "holes" after the material is spread. In order to resolve this problem, it is of interest to have the recoater blade cover a certain start-up path outside the working field, but near its border. In fact, during this start-up path, prior to entering into continuous operation, the recoater blade in accordance with the invention blends the material located downstream of it and this blending has the effect, on the one hand, of homogenizing the material initially delivered, and on the other, of shaping the materials so it obtains the desired log form.--

Please replace the paragraph beginning at page 8, line 25, with the following:

-- BRIEF DESCRIPTION OF THE DRAWINGS

To provide a better understanding of the object of the invention, several embodiments depicted in the attached drawings will be described as illustrative examples, without limitation. On these drawings:

Fig. 1 shows a partial perspective view of a device for the embodiment of the technique in accordance with the invention;

Fig. 2 shows a partial longitudinal cross-section of the preferred embodiment of a recoater blade for the implementation of the invention;

Fig. 3 shows three side views of an example of one specific embodiment of the coating phases in accordance with the invention, with reversal of the recoater blade's direction of movement in stage 3B in order to perform two successive coating phases in stages 3A and 3C.--

Please replace the paragraph beginning at page 8, line 36, with the following:

--DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Fig. 1 shows a perspective of a device for the embodiment of the technique in accordance with the invention. A device to induce transformations 1 in a working field 104, is laid out over the center of a frame 2 comprised of a rectangular part (with dimensions of LX along the X-axis and LY along the Y-axis) whose upper side is flat, with the frame being linked to a control and drive mechanism 3 through a connector 4. A table T whose upper side 5 is flat and horizontal, with a rectangular opening 6 with dimensions greater than LX along the X-axis and greater than LY along the Y-axis, is laid out in such a way that, when it moves, the frame 2 can pass through said opening 6. Two other elongated openings (7, 8), with lengths approximately equal to LX, laid out in parallel to the X-axis, a short distance from the edge of the opening 6, also fall within said table T. An elongated recoater blade 9, linked to the control and drive mechanism 101 to be moved along a horizontal path along the Y-axis, may move from an initial position (the position indicated by the solid line) to a final position (9': the position of the recoater blade indicated by the dotted line). Material feeder mechanisms 103, comprised, for example, of plungers initially filled with materials, or a pump device, are linked to the openings 7 and 8 in order to allow for the deposit of material, in the upward direction Z, through said openings 7 and 8. Openings 6, 7 and 8 are located in a low-lying area, defined by contour 10, in which the upper side of the table is flat and horizontal, but whose height is slightly lower than that of side 5.--

Please replace the paragraph beginning at page 9, line 33, with the following:

-- Fig. 2 shows a cross-section of a preferred embodiment of a recoater blade in accordance with the invention. The pusher is comprised of two parts (22, 24) with a constant cross-section, linked to a chassis 21. The chassis is linked, directly or otherwise to the control and drive mechanisms (not depicted). The part 22 has a tapered shape in its lower portion 23. Part 24 may be moved vertically (Z-axis), and has an angular portion 25 in its lower part comprising a protuberance with respect to the side of part 22 in contact with the raw material 28, such that the height at which said protuberance is located is easily adjustable in order to allow for adaptation to

different types of materials. Two rollers, 26 and 27, comprised of cylinders laid out in parallel to the pusher, are linked to the chassis 21 by brackets (not depicted) and each one is also linked to a drive mechanism (not depicted) so they may be rotated in the "rolling direction." The recoater blade assembly thus comprised is moved along the Y-axis (in the direction indicated by the arrow F), driving a volume of material 28, which, due to the rotation movement of the rollers, comes to form a type of log with a virtually constant cross-section along its axis, rolling on itself along a rotational axis parallel to the recoater blade (this rotation of the driven material is indicated by the small arrows inside volume 28), in accordance with the technique embodied by the invention, and rolling on the free surface of the previously deposited material (represented by plane 29). Near area 30, a portion of the transported volume of material is placed on the surface 29 (downstream feeding), this deposit being leveled off by the lower edge of the pusher near area 31, to create, upstream, a new free surface of material, coinciding with the height of working field 32. The essential adjustment parameters of this device are the following: D1 and D2, the respective diameters of cylinders 26 and 27; A1 and A2, the respective angular speed of rotation of cylinders 26 and 27; (Z1 and Y1) and (Z2 and Y2), the coordinates of the respective axes of parts 26 and 27 with respect to the point of contact between the surface 32 and the lower part of the part 22; ZC and YC, the dimension of the cavity formed by the assembly of parts 23 and 24 (ZC being easily adjustable by moving the part 24), and finally VY, the speed of the assembly's movement.--

Please replace the paragraph beginning at page 10, line 21, with the following:

-- If the distance ZC is significantly greater than the distance Z1 or Z2, the material located in area 23 risks being sucked upward, which could lead to a detachment of the material, or even a lack of material at the level of area 23. On the other hand, the closer the distance ZC is to the distance Z1 or Z2, the more part 24 will compress the material downward into area 23. A good compromise would consist in providing a distance ZC roughly equal to two times distance Z1 in order to balance the upward force of the material caused by roller 26, with the compressing force of the material from protuberance 24.--

Please replace the paragraph beginning at page 10, line 31, with the following:

--Fig. 3 shows a recoater blade comprised of the combination of two identical assemblies in a "face-to-face" configuration, allowing for the reversal of the direction of recoater blade's

movement between two successive coating phases (back and forth movement). The operation of this device is drawn up in three stages (3A, 3B and 3C).--

Please replace the paragraph beginning at page 11, line 38, with the following:

--This association is undertaken by two T-shaped parts located at the ends of the elongated assembly formed by the two recoater blades, forming a sort of frame. In the drawing's side view, only one of the ends of the frame has been depicted. The T-shaped part depicted, comprised of a "horizontal" bar 42, and a "vertical" leg 43, is linked to a carriage CH, driven in parallel to the working field represented by line 45, the link being made by means of a pivot hinge P. The lower extremity of the T is linked, in the depicted example, by a second pivot hinge P', to the drive mechanisms comprised here of a belt 46 with a portion parallel to the working field 45, said belt being driven by a drive mechanism (motor, pulley, etc., not depicted). Two adjustable stops (47, 48) located on the carriage CH, allow for the limitation of the sweeping movement of the T-shaped part. In Fig. 3A, a force directed along arrow FA is applied to the belt, provoking a sweeping of the frame in the direction indicated by arrow B. When the part 43 comes in contact with the stop 47, the frame is blocked in its pivot movement and is driven in the direction of arrow FA. The adjustment of the stop 47 allows for the height of the layer deposited by the part 40 of the recoater blade to coincide with the working field 45. The log of material 49 has been depicted near the portion 40 of the recoater blade; this volume of material is transported in the direction FA in order to perform the coating. In Fig. 3B, the force applied to the belt is reversed (direction FB), which translates into a sweeping of the frame in the direction B'. During this sweeping, the log of material 49 remains in contact with the working field 45, and leaves contact with the part 40 of the recoater blade which is lifted with respect to the surface 45 at the time of the sweeping. In Fig. 3C, the sweeping movement initiated in Fig. 3B is completed and the part 43 comes in contact with the stop 48. The adjustment of the stop 48 is such that the height of the layer deposited by part 41 of the recoater blade coincides with the working field plane 45, so that, at the time of the movement (in the direction of arrow FB, once the sweeping is completed), the part 41 of the recoater blade is loaded with the volume of material in order to perform a coating of the working field. It is confirmed that in the back and forth movement over the working field, the material is transferred from one recoater blade to the other (or, if we consider the assembly as a single recoater blade, from one side to the other), which allows for the potential feeding of the assembly on a single